Met Office at Scottish wind energy conferences

15 June 2011 - Met Office experts will be presenting new ways to maximise wind farm investment at wind energy conferences in Scotland this week in light of the volatility of wind resource over the last year.

Weather patterns, and crucially wind speeds, underpin the success for this type renewable energy. The severe gales experienced in Scotland last month coupled with the generally lower than average wind speeds experienced over the last year demonstrate the challenges of wind as a renewable energy resource.

However, the Met Office can make a difference to the success of wind farms from site search and selection, development through to operations with a suite of innovative products aimed directly at the renewable energy sector including:

- Virtual Met Mast - our site-specific wind analysis model-based tool
- VisualEyes - an intuitive, web-based weather alert system designed in conjunction with the industry to help manage wind farm assets.

Tony Duffin, Regional Manager (South West) for Partnerships for Renewables said: "We have been working closely with the Met Office team using Virtual Met Mast for about two years now and we are very happy with the results. We are confident that it adds value as a routine part of managing wind risk in the development of our sites."

Virtual Met Mast allows businesses and investors to access specially produced wind assessments for both onshore and offshore sites including mean wind speed, wind direction, exceedance values, air density, wind shear and turbulence intensity in advance of a costly met mast installation.

Stephen Norman, Met Office Wind Energy Consultant said: "Virtual Met Mast has demonstrated that it can take into account the variability of the British weather when determining the long term wind climatologies that are fundamental to establishing the return on investment in wind assets."

Investing in renewable energy

Providing clear and detailed information, Virtual Met Mast provides cost-effective and reliable site-specific analysis to help investors make the right decisions, based on world leading research and development from the Met Office which:

- Combines cutting-edge science and supercomputer technology
- Uses the Met Office's Numerical Weather Prediction (NWP) model, which incorporates observations from satellites, ships, aircraft, ground stations and radar as a foundation for generating site-specific wind farm assessments
- Employs a wide range of continuously monitored wind observations to produce a core wind analysis record (extending back over 20 years)
- Provides site-specific data at hub height for both onshore and offshore locations
- Allows outputs to be correlated with real met mast data to derive the ultimate value from your Virtual Met Mast assessment
- Provides a variety of essential statistics, including confidence figure.

Virtual Met Mast

VisualEyes

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